United States Patent and Trademark Office

•

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	1
10/586,399	07/17/2006	Masahiko Satoh	293468US3PCT	2534	
22850 7590 12/10/2007 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET			EXAM	EXAMINER	
			CHEN, S	CHEN, SOPHIA S	
ALEXANDRIA, VA 22314			ART UNIT	PAPER NUMBER	
		2852			
					_
			NOTIFICATION DATE	DELIVERY MODE	
			12/10/2007	ELECTRONIC	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com oblonpat@oblon.com jgardner@oblon.com

,	Application No.	Applicant(s)				
	10/586,399	SATOH ET AL.				
Office Action Summary	Examiner	Art Unit				
	Sophia S. Chen	2852				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
Responsive to communication(s) filed on 2a) ☐ This action is FINAL.						
Disposition of Claims						
4) Claim(s) 1-18 is/are pending in the application 4a) Of the above claim(s) is/are withdray 5) Claim(s) is/are allowed. 6) Claim(s) 1,2,10 and 11 is/are rejected. 7) Claim(s) 3-9 and 12-18 is/are objected to. 8) Claim(s) are subject to restriction and/or Application Papers 9) The specification is objected to by the Examine 10) The drawing(s) filed on 17 July 2006 is/are: a)	wn from consideration. or election requirement. er. □ accepted or b)⊠ objected to b					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 7/17/06	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:	ate				

DETAILED ACTION

Drawings

- 1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: S (page 13, line 11, etc.), 17Y, 17C, 17M, and 17K (page 13, line 20). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.
- 2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 20, 35, and 35a (Figure 2). Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the

10/586,399

Art Unit: 2852

filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

- 3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because of the following informalities:
 - a. Reference character "101" has been used to designate both "toner image forming part" (page 16, lines 13-14) and "a head end part" (page 24, lines 18-19, etc. and Figures 3, 4, 5, and 9(a)).
 - b. Reference character "49" has been used to designate both "a release agent applying roller" (page 23, line 22, etc. and Figure 3) and "a casing" (Figure 3, between reference numerals 100 and 102).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Application/Control Number:

4. The drawings are objected to because the reference numeral "10" in Figure 4 should be labeled as "1". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

- 5. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
- 6. The abstract of the disclosure is objected to because of the following informalities:
 - a. The abstract includes legal phraseology, such as "comprises" (line 5).

Application/Control Number:

10/586,399

Art Unit: 2852

- b. The abstract exceeds 150 words.
- Correction is required. See MPEP § 608.01(b).
- 7. The disclosure is objected to because of the following informalities:
 - a. Page 12, line 21, "10" should be "1".
 - b. Page 13, line 5, "1B" should be "1b".
 - c. Page 13, line 6, "1B" should be "1b".
 - d. Page 15, line 3, "3" should be "S".
 - e. Page 15, line 8, "10" should be "1".
 - f. Page 15, line 23, "101y" should be "101Y".
 - g. Page 16, line 8, "101y" should be "101Y".
 - h. Page 27, line 8, "transfer" should be "fixing".
 - i. Page 28, line 5, "103" should be "102".
 - j. Page 28, line 12, "103" should be "102".
 - k. Page 28, line 13, "103" should be "102".

Appropriate correction is required.

8. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

9. Claims 1-18 are objected to because of the following informalities:

Page 5

- a. Claim 1, line 16, "the surface moving body" should be either "the surface moving bodies" or "one of the surface moving bodies".
- b. Claim 1, line 17, "the surface moving body" should be either "the surface moving bodies" or "the one of the surface moving bodies".
- c. Claim 1, line 20, "the surface moving body" should be either "the surface moving bodies" or "the one of the surface moving bodies".
- d. Claim 2, lines 3-4, "the surface moving body" should be either "the surface moving bodies" or "the one of the surface moving bodies".
- e. Claim 3, line 4, "the surface moving body" should be either "the surface moving bodies" or "the one of the surface moving bodies".
- f. Claim 4, line 4, "the surface moving body" should be either "the surface moving bodies" or "the one of the surface moving bodies".
- g. Claim 4, lines 5-6, "the surface moving body" should be either "the surface moving bodies" or "the one of the surface moving bodies".
- h. Claim 4, line 8, "the surface moving body" should be either "the surface moving bodies" or "the one of the surface moving bodies".
- i. Claim 4, lines 9-10, "the surface moving body" should be either "the surface moving bodies" or "the one of the surface moving bodies".
- j. Claim 5, line 4, "the surface moving body" should be either "the surface moving bodies" or "the one of the surface moving bodies".
- k. Claim 5, lines 6-7, "the surface moving body" should be either "the surface moving bodies" or "the one of the surface moving bodies".

- 1. Claim 6, line 1, "claim 1" should be either "claim 4" or "claim 5".
- m. Claim 7, last line, "the surface moving body" should be either "the surface moving bodies" or "the one of the surface moving bodies".
- n. Claim 8, line 4, "the surface moving body" should be either "the surface moving bodies" or "the one of the surface moving bodies".
- o. Claim 10, line 21, "the surface moving body" should be either "the surface moving bodies" or "one of the surface moving bodies".
- p. Claim 10, line 22, "the surface moving body" should be either "the surface moving bodies" or "the one of the surface moving bodies".
- q. Claim 10, line 25, "the surface moving body" should be either "the surface moving bodies" or "the one of the surface moving bodies".
- r. Claim 11, lines 4-5, "the surface moving body" should be either "the surface moving bodies" or "the one of the surface moving bodies".
- s. Claim 12, line 5, "the surface moving body" should be either "the surface moving bodies" or "the one of the surface moving bodies".
- t. Claim 13, lines 6-7, "the surface moving body" should be either "the surface moving bodies" or "the one of the surface moving bodies".
- u. Claim 13, line 9, "the surface moving body" should be either "the surface moving bodies" or "the one of the surface moving bodies".
- v. Claim 13, lines 10-11, "the surface moving body" should be either "the surface moving bodies" or "the one of the surface moving bodies".

- w. Claim 14, line 5, "the surface moving body" should be either "the surface moving bodies" or "the one of the surface moving bodies".
- x. Claim 14, lines 7-8, "the surface moving body" should be either "the surface moving bodies" or "the one of the surface moving bodies".
 - y. Claim 15, line 2, "claim 10" should be either "claim 13" or "claim 14".
- z. Claim 16, last line, "the surface moving body" should be either "the surface moving bodies" or "the one of the surface moving bodies".
- aa. Claim 17, line 5, "the surface moving body" should be either "the surface moving bodies" or "the one of the surface moving bodies".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 11. Claims 1, 2, 10, and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohashi (JP 2001-215841 A).

Ohashi discloses an image forming apparatus (Figure 6), comprising: a toner image forming part 14 configured to form a toner image on a transfer medium S; and a fixing part 15, 16 configured to fix the toner image to the transfer medium S; wherein the fixing part comprising: two surface moving bodies 15 and 16, at least one of which is driven so that the surface moving bodies come in contact with each other, a nip is

formed, and surfaces of the surface moving bodies in contact move in the same direction (Figure 6); and a heat source configured to heat at least one of the surface moving bodies 15 (paragraph [0004]; wherein a transfer medium S having a surface where a non-fixed toner image is formed is put in the nip so that the toner image is heatfixed on the transfer medium S (paragraph [0004] and Figure 6); the fixing device further comprises a separation plate 1, 5, or 9 configured to remove the transfer medium S, the transfer medium S no being separated from one of the surface moving body 15 or 16 after the transfer medium S passes through the nip, from the surface moving body 15 or 16 (Figure 6, reference character A2 or A3); and rise of temperature of a head end part 1a, 6a, or 10a, at a side of the surface moving body 15 or 16, of the separation plate 1, 5, or 9 is given priority over rise of temperature of other parts of the separation plate (paragraphs [0020], [0029], and [0031]; inherently due to the powder metal); wherein the separation plate 1, 5, or 9 has a structure where a heat capacity of the head end part 1a, 6a, or 10a, at the surface moving body side 15 or 16, of the separation plate 1, 5, or 9 is lower than a heat capacity of other parts of the separation plate (paragraphs [0020], [0029], and [0031]; inherently due to the powder metal).

Allowable Subject Matter

12. Claims 3-9 and 12-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 2852

Other Prior Art

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Mills et al. (US Pat. No. 4,821,064) discloses an image forming apparatus comprising a skive member being made of a hard material such as aluminum.

Flynn (US Pat. No. 5,241,354) discloses an image fixing device comprising a fixing roller, a pressure roller, and a flexible separator device.

Yajima et al. (US Pat. No. 5,517,292) discloses an image fixing apparatus comprising a fixing roller, a pressure roller, and a separating unit with a separation claw.

Cahill (US Pat. No. 5,532,810) discloses a fuser assembly comprising a fixing roller, a pressure roller, and skive fingers.

Uehara et al. (US Pat. No. 6,236,829 B1) discloses an image fixing device comprising a fixing roller, a pressure roller, and a separator device having a head end part.

Baughman et al. (US Pat. Pub. No. US 2002/0071699 A1) discloses an image fixing device comprising a fixing roller, a pressure roller, and a separator device.

Ohuchi et al. (US Pat. No. 6,661,994 B2) discloses an image fixing device comprising a fixing roller, a pressure roller, and a separator device.

Rasch et al. (US Pat. Pub. No. US 2004/0151521 A1) discloses an image fixing device comprising a fixing roller, a pressure roller, and a separator device having a stripper finger structure.

Application/Control Number:

10/586,399 Art Unit: 2852

Gomi et al. (US Pat. Pub. No. US 2004/0170454 A1) discloses an image fixing device comprising a fixing roller, a pressure roller, and a separator device.

Kikuchi et al. (US Pat. No. 6,795,676 B2) discloses an image fixing device comprising a fixing roller, a pressure roller, and a separator device.

Inomata (US Pat. Pub. No. US 2005/0008408 A1) discloses an image fixing device comprising a fixing roller, a pressure roller, and a separation claw.

Sakai et al. (JP 09-114303 A) discloses an image fixing device comprising a fixing roller, a pressure roller, and a separator device having a coating at the top end of a separating pawl.

Matsuda et al. (JP 10-074014 A) discloses an image fixing device comprising a fixing roller, a pressure roller, and a paper separating pawl having a coating layer.

Mizutani et al. (JP 2003-122173 A) discloses an image fixing device comprising a fixing roller, a pressure roller, and a separator device.

Fujisawa (JP 2004-205749 A) discloses an image fixing device comprising a fixing roller, a pressure roller, and a separator device.

Sagawa (JP 2005-077515 A) discloses an image fixing device comprising a fixing roller, a pressure roller, and a separator device.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sophia S. Chen whose telephone number is (571) 272-2133. The examiner can normally be reached on M-F (7:00-3:00) First Friday Off.

10/586,399

Art Unit: 2852

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Gray can be reached on (571) 272-2119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Sophia S. Chen Primary Examiner Art Unit 2852

Ssc

November 28, 2007